Foundations & Pre-Calculus Math 10 – Formulas

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **x** | **x2** | **x3** | **x4** | **x5** | **x6** | x7 | x8 |
| **2** | 4 | 8 | 16 | 32 | 64 | 128 | 256 |
| **3** | 9 | 27 | 81 | 243 | 729 | 2187 | 6561 |
| **4** | 16 | 64 | 256 | 1024 | 4096 | 16384 | 65536 |
| **5** | 25 | 125 | 625 | 3125 | 15625 | 78125 |  |
| **6** | 36 | 216 | 1296 | 7776 | 46656 |  |  |
| **7** | 49 | 343 | 2401 | 16807 |  |  |  |
| **8** | 64 | 512 | 4096 | 32768 |  |  |  |
| **9** | 81 | 729 | 6561 | 59049 |  |  |  |
| **10** | 100 | 1000 | 10 000 | 100 000 | 1 000 000 | 10 000 000 | 100 000 000 |
| **11** | 121 | 1331 | 14641 | 161051 |  |  |  |
| **12** | 144 | 1728 | 20736 | 248832 |  |  |  |
| **13** | 169 | 2197 | 28561 | 371293 |  |  |  |
| **14** | 196 | 2744 | 38416 | 537824 |  |  |  |
| **15** | 225 | 3375 | 50625 | 759375 |  |  |  |

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| **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
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Slope:  Pythagorean Theorem **a2 + b2 = c2**

Point-slope form:  Slope-intercept form : 

Standard form :  General form: 

Sin x =  cos x = tan x = SOH CAH TOA

**Conversions : Imperial Conversions: Metric**

|  |  |
| --- | --- |
| 1 ft = 12 in | 1 cm = 10mm = .01 m |
| 1 yd = 3 ft = 36 in. | 1 m = 100 cm = .001 km |
| 1 mi = 1760 yd = 5280 ft | 1 km = 1000 m = 100 000 cm |

**Conversions: Metric & Imperial Conversions: Imperial to Metric**

|  |  |
| --- | --- |
| 1 mm = 0.0394 in | 1 in = 25.4 mm |
| 1 cm = 0.3937 in | 1 in = 2.54 cm |
| 1 m = 3.2808 ft | 1 ft = 30.48 cm |
| 1 m = 1.0936 yd | 1 ft = 0.3048 m |
| 1 km = 0.6214 mi | 1 yd = 0.9144 m |
|  | 1 mi = 1.6093 km |